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STATE OF NEW MEXICO

ENVIRONMENTAL EVALUATION GROUP

P.O. BOX 3149
CARLSBAD, NEW MEXICO 88220
(505) 887-8480

March 9, 1988

The Honorable Garrey Carruthers
Governor
State of New Mexico
Executive Legislative Building
Santa Fe, New Mexico 87503

Dear Governor Carruthers:

The following analysis is provided in accordance with your request to evaluate the National Academy of Sciences (NAS) report on Brine Accumulation in the WIPP Facility, an issue first raised by Dr. John D. Bredehoeft at an NAS WIPP Panel meeting in February 1986.

A remarkable aspect of the NAS report is its close similarity with recommendations that the EEG has made during the past two years. Their conclusion that the issues do not warrant a suspension of the activities at WIPP is one that EEG presented at the meeting in Albuquerque. The following is an analysis of the seven recommendations contained in the NAS report.

1. Develop a comprehensive experimental program to determine salt permeability and gas generation from the wastes.

EEG has been asking DOE to publish these plans for the past two years.

2. Publish detailed descriptions of the plans for the first 5-year period of waste emplacement for experimental programs.

EEG has repeatedly pointed out the absence of any experimental plans for the waste emplacement phase of the first 5 years of the Project to both DOE and the state policy makers.

3. Because of continued uncertainty about achieving compliance with EPA Standards, the Panel agrees with EEG that no more drums than those to be used in well-described and necessary experiments be placed underground.

EEG made this recommendation to minimize unnecessary radiation exposure to the workers and, of course, agrees with the Panel.



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4. Experiments should be designed to lessen uncertainties, not to verify preconceived ideas about their probable results.

This is a good principle for any scientific endeavor and we certainly support it.

5. Performance assessment calculations should be continually refined to test the confidence of achieving compliance with EPA Standards.

EEG has always supported this concept.

6. Multiphase models should be developed to describe the behavior of the complex fluids that may form in the repository.

EEG supports this recommendation.

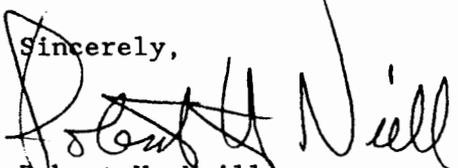
7. Investigate the feasibility of engineering solutions to the potential brine problem.

We recommended this at the February 18 NAS meeting and in a paper presented at the Waste Management 1988 Meeting in Tucson, Arizona, on March 2, 1988.

In summary, EEG supports all of the recommendations of the NAS Panel and is pleased that the Panel adopted many of the EEG recommendations. Relative to the body of the report, we do not fully agree with all of the Panel's conclusions, particularly those related to the certainty with which permeability values are known and the potential for problems with gas generation. However, our concerns should be resolved by the experiments recommended by the Panel.

I would be pleased to brief you on the status of this as well as other issues on the WIPP Project at your convenience.

Sincerely,



Robert H. Neill
Director

RHN:ss

cc: Tom Bahr
Larry Gordon
Michael Burkhart
Kirkland Jones
Dewey Lonsberry
Vickie Fisher